

IN THE CLAIMS

1. (Currently Amended) A method for decoding compressed video comprising:

reading a stream of compressed video into a memory, said video having multiple pictures,

each picture having one or more independent slices;

assigning, via a first processor of a group of symmetric multiple processors sharing said

memory, at least one independent slice per processor ~~to be decoded by the~~

~~processors in parallel~~, including assigning a varying number of slices to

individual processors; and

each of the symmetric multiple processors, including the first processor, decoding the

assigned slices in parallel without reading from a program memory other

than the shared memory.
3. (Canceled)
4. (Previously Presented) The method of claim 1, wherein assigning the independent slices
includes assigning a comparable work load to the processors.
5. (Previously Presented) The method of claim 4, wherein assigning the independent slices
includes placing in memory as a local variable, for each processor, the slices to be decoded by a
respective processor.
6. (Original) The method of claim 5, wherein each slice includes at least one macroblock.
7. (Original) The method of claim 6, wherein said video is encoded in MPEG.

8. (Original) The method of claim 7, wherein the method of decoding is performed in real-time.

9. (Currently Amended) A computer-readable medium having stored thereon a set of instructions, said set of instruction for decoding compressed video, which when executed by a processor, cause said processor to perform a method comprising;

reading a stream of compressed video into memory, said video having multiple pictures,
each picture having one or more independent slices;

assigning, via a first processor of a group of symmetric multiple processors sharing said memory, at least one independent slice per processor ~~to be decoded by the processors in parallel~~, including assigning a varying number of slices to individual processors; and

each of the symmetric multiple processors, including the first processor, decoding the assigned slices in parallel without reading from a program memory other than the shared memory.

11. (Canceled)

12. (Previously Presented) The computer-readable medium of claim 10, wherein assigning the independent slices includes assigning a comparable work load to the processors.

13. (Previously Presented) The computer-readable medium of claim 12, wherein assigning the independent slices includes placing in memory as a local variable, for each processor, the slices to be decoded by a respective processor.

14. (Original) The computer-readable medium of claim 13, wherein each slice includes at least one macroblock.

15. (Original) The computer-readable medium of claim 14, wherein said video is encoded in MPEG standard.

16. (Original) The computer-readable medium of claim 15, wherein the method of decoding is performed in real-time.

17. (Currently Amended) A computer system comprising:

a plurality of symmetric multiple processors;

a memory coupled to said plurality of symmetric multiple processors;

a first unit of logic in a first processor of said group of symmetric multiple processors sharing said memory, said first unit of logic to read a stream of compressed video into said memory, said video having multiple pictures, with each picture having one or more independent slices; ~~and~~

said first unit of logic further assigns, ~~via a first processor of said group of~~

~~processors sharing said memory,~~ at least one independent slice per

~~processor to be decoded by the processors in parallel,~~ said first unit to assign a varying number of slices to individual processors; and

each of the symmetrical multiple processors, including the first processor, decodes the

assigned slices in parallel without reading from a program memory other than the shared memory.

19. (Canceled)

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20. (Previously Presented) The computer system of claim 20, wherein said first unit of logic assigns a comparable work load to the processors.

21. (Original) The computer system of claim 20, wherein said first unit of logic places in memory as a local variable, for each processor, the slices to be decoded by a respective processor.

22. (Original) The computer system of claim 21, wherein each slice includes at least one macroblock.

23. (Original) The computer system of claim 22, wherein said video is encoded in MPEG standard.

24. (Original) The computer system of claim 23, wherein system computer system decodes said video in real-time.